On Alternatives in Imperatives: The Case of Romanian 'vreun'

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ON ALTERNATIVES IN IMPERATIVES: THE CASE OF ROMANIAN *VREUN**

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1 Introduction

Epistemic indefinites (henceforth EIs) are existential elements that convey some form of ignorance or indifference with respect to the referent of the indefinite. EIs across languages have received an increasing amount of attention over the last decade (e.g. Jayez and Tovena 2006, Alonso-Ovalle and Menéndez-Benito 2010, Fălăuş 2010, Giannakidou and Quer 2011, Aloni and Port 2011, Chierchia 2011), and although their properties are still a mater of empirical investigation, there is one dimension of variation which seems to play a crucial role in their behavior. More precisely, EIs have been shown to differ with respect to the extent of variation ("freedom of choice") imposed on the domain of quantification, which can be *total* or *partial*:

(1) a. Total Variation (*aka* Free Choice): $\forall x \Diamond \phi$
b. Prendi *una* carta *qualsiasi*!
Take a card QUALSIASI
'Take a card, any card.'
(2) a. Partial Variation (*aka* Modal Variation): $\neg \exists x \Box \phi$
b. Maria deve aver sposato *un qualche* professore.
Maria must have married a QUALCHE professor
'Maria must have married some professor, I don't know who'

Whereas the EI in (1b) signals that *all* cards in the context under consideration qualify as equally possible options, the EI in (2b) conveys a weaker modal inference: *some, but not necessarily all*

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alternatives in the relevant domain are epistemic possibilities. As such, it is compatible with the exclusion of some of the possible options.

This paper provides further support for the relevance of the distinction between total/partial variation by focusing on the Romanian EI *vreun*, whose distribution has been argued to be restricted to epistemic contexts (Fălăuş 2009, 2010). I introduce new facts and show that *vreun* can be used in certain imperatives, a behavior which doesn't easily fit with its exclusion from deontic contexts. To derive this new observation, I extend the alternative-based account proposed in Fălăuş (2010) and argue that *vreun* is an alternative-activating existential which is uniformly excluded from total variation contexts. Its use in imperatives will be shown to fall out from its conjectured lexical semantics and the way it interacts with (independently established) properties of imperatives (drawing on Aloni (2007)).

The paper is organized as follows. Section 2 introduces the empirical puzzle under investigation. Section 3 is devoted to the proposal in Fălăuş (2010), couched in the alternative-based framework developed in Chierchia (2011). Section 4 shows how this account can be extended to the distribution of *vreun* in imperatives, once we adopt the distinction in Aloni (2007) between choice-offering and alternative-presenting imperatives. Section 5 concludes and discusses some open issues.

2 The puzzle: *vreun* in imperatives

The distributional property of *vreun* that is most relevant for our present purposes is its behavior in modal contexts. As shown in Fălăuş (2009), the determiner *vreun* can only be used under a (possibility or necessity) modal if the modal receives an epistemic interpretation, a restriction that distinguishes *vreun* from other EIs documented to date. The ungrammaticality of (4), where *vreun* is embedded under a deontic modal illustrates this restriction:

(3) (The lights in the office are still on)
Trebuie/ Poate să fie ***vreun*** angajat care lucrează până târziu.
must / may SUBJ be.3SG VREUN employee who work.3SG until late
'It must/might be some employee working late.'

(4) **Trebuie/ *Pot* să trimit ***vreo*** propunere până mâine.
must can SUBJ send.1SG VREUN proposal by tomorrow
'I must/can send some proposal by tomorrow.'

Let us now examine a closely related context, namely imperatives. Farkas (2002), which provides the first detailed discussion of the properties of *vreun*, shows that it is ruled out in imperatives:

(5) a. *Ia ***vreun*** măr! b. *Apasă ***vreo*** tastă!
Take.IMP.2SG VREUN apple Press.IMP.2SG VREUN key

Given the close similarity between imperatives and deontic modal contexts, the ill-formedness of these examples is fully expected, and seems to fit rather straightforwardly with the distribution of *vreun* in modal contexts. However, a closer examination of empirical facts reveals that there are imperatives which allow *vreun*:

(6) a. Verifică pe ***vreun*** site, poate e o greşeală.

Check.IMP.2SG on VREUN site maybe be.3SG a mistake
'Check on some website, maybe it's a mistake.'

b. Întreabă ***vreun*** agent de voiaj care e cea mai bună alegere pentru concediu.
Ask.IMP.2SG VREUN agent of travel which is the more good choice for holiday
'Ask some travel agent which is the best choice for the holiday.'

The contrast between (5) and (6) is surprising and calls for an explanation. I should note right away that the solution cannot lie in the "strength" of the imperative, i.e. the difference between, say, an order and a suggestion. The imperatives in (5) can be construed as orders, suggestions or advice, and yet *vreun* is infelicitous. Moreover, this pattern does not straightforwardly fit with the restriction to epistemic contexts. The obvious reason is that imperatives are *not* epistemic modals. To make this point more precise, let us take a brief look at the semantics of imperatives.

For concreteness, I will formulate the problem by using the modal analysis of imperatives in Schwager (2006).[1] On this account, imperatives contain a covert modal operator, which, like any other modal, is interpreted with respect to a modal base and an ordering source. More precisely, on the basis of the common conversational ground (i.e. what the hearer and speaker both consider to be a possible future course of events), the speaker indicates to the hearer a certain future state of affairs, with respect to certain rules, desires or goals of (at least one of) the participants. More relevant for our present goals is the presuppositional meaning component, responsible for the performativity effect associated with imperatives. This consists of the following set of conditions which need to be satisfied in the context of utterance:

(7) (i) *Authority Condition*: the speaker has some authority on the addressee
(ii) *Ordering Source Condition*: the ordering source has to be preference-related
(iii) *Ordering Source Affirmation*: the speaker considers it to be better that the proposition *p* expressed by the imperative comes out as true
(iv) *Epistemic Uncertainty Condition*: the speaker considers both *p* and *non p* to be possible.

Among these, the "epistemic uncertainty condition" is the one that seems most directly related to epistemic contexts. It is meant to capture the infelicity of sequences such as *Do it! But I know you will not*; or *I know that you are going to do it (anyway), so do it!* Summarizing, the modal operator involved in the interpretation of imperatives is closely related to deontic and bouletic modals (in virtue of the ordering source), but also includes an epistemic component, which we independently know to be crucial for the distribution of *vreun*. However, these meaning components determine the interpretation and the use of *any* imperative, so we would expect *vreun* to be uniformly accepted or excluded, depending on whether it is sensitive to the preference-related or the epistemic component. The contrast between (5) and (6) above shows that the situation is more complex, in ways which we have yet to understand.

The discussion in this section indicates that *vreun* is sensitive to fine-grained distinctions among imperatives, which we need to unravel. The puzzling distribution of *vreun* in imperatives thus raises two main questions: on the one hand, what is the distinction among imperatives that determines the (non-)occurrence of *vreun*? On the other hand, how do imperatives square with the exclusion from non-epistemic contexts? To put it differently, is there a way to uniformly

[1] For detailed discussions of the semantics of imperatives, see e.g. Han (2000), Schwager (2006), Aloni (2007), Portner (2007, 2009), Condoravdi and Lauer (2009).

characterize, and derive, the distribution of the EI *vreun*? To provide answers to these questions, I extend the proposal in Fălăuș (2010), which essentially argues that *vreun* is excluded from contexts that sustain a total variation inference. After presenting this analysis in section 3, I return to the distribution of *vreun* in imperatives and argue that the imperatives in (5) give rise to precisely the strong, total variation inference, which clashes with the lexical semantics of *vreun*.

3 An alternative-based account of *vreun*

The alternative-based analysis of *vreun* proposed in Fălăuș (2010, 2012) is couched in the unitary approach to polarity and free choice phenomena developed in Chierchia (2011). Before focusing on *vreun,* let me briefly introduce the aspect of the alternative-based framework that is directly relevant for our current purposes, namely the derivation of modal inferences arising with ordinary scalar terms (e.g. disjunction, plain indefinites) and EIs.

3.1 Disjunction and free choice indefinites: a unitary treatment

Chierchia (2011, 2012) proposes a unitary treatment of free choice effects arising with disjunction and free choice indefinites, a term that subsumes both universal-FCIs like English *any* or Italian *qualsiasi*, and EIs like German *irgendein* or Italian *un qualche*. The empirical motivation for this unified account lies in the long-standing observation that these elements have a similar behavior in modal and downward-entailing contexts (e.g. Horn 1972, Kamp 1973, Aloni 2007). More precisely, in modal contexts, both disjunction and free choice indefinites give rise to free choice inferences. The examples in (8) illustrate this similarity under possibility modals, but facts are parallel under necessity operators:

(8) a. You *may* have a cookie ***or*** a cupcake.
(i) Assertion: ◊ (have a cookie ∨ have a cupcake)
(ii) Enriched meaning: ◊ have a cookie ∧ ◊ have a cupcake
b. Du *darfst* ***irgendeinen*** Kuchen essen
You may IRGENDEIN cake eat
(i) Assertion: ◊ (eat cake *a* ∨ eat cake *b* ∨ eat cake *c*)
(ii) Enriched meaning: ◊ eat cake *a* ∧ ◊ eat cake *b* ∧ ◊ eat cake *c*

In both cases, an arguably existential element ends up having a conjunctive interpretation, whereby any of the relevant alternatives (cookie or cupcake, or whatever relevant cake in the context of utterance of (8b)) is a permissible option.

To uniformly capture the observed free choice effects[2], Chierchia (2012), drawing on insights in Kratzer and Shimoyama (2002) and Fox (2007), explicitly argues that (a) a unified account of free choice disjunction and free choice indefinites is necessary, and that (b) a principled unified

[2] The fact that free choice effects tend to disappear in downward-entailing contexts constitutes an additional point of similarity between disjunction and EIs:

(1) a. To get the airport, you *can't* take the bus ***or*** the subway (you can only take a taxi).
b. *Niemand* hat ***irgendein*** Buch mitgebracht
Noone had IRGENDEIN book brought along
'No one has brought along any book'

The most natural interpretation of (1a) is that both the bus and the subway are disallowed, without any trace of free choice enrichment. Similarly, *irgendein* is interpreted as a plain existential in the scope of negation.

treatment is possible, within an alternative-based framework. The proposed account rests on the assumption that both disjunction and free choice indefinites (be they universal-FCIs or EIs) are alternative-activating elements. The difference lies in the fact that the activation of alternatives is optional for disjunction (and other scalar terms), but obligatory for free choice indefinites. Once they are active, alternatives need to be factored into meaning. One way to do this (most recently defended in Chierchia, Fox and Spector 2011) is through the insertion of an exhaustivity operator, a covert counterpart of *only*, whose role is to eliminate any alternative stronger than the assertion:

(9) $[[O]](Alt_{<<st>t>})(p_{<st>})(w) = 1$ *iff* $p(w) = 1 \wedge \forall q \in Alt(p)[q(w) = 1 \rightarrow p \subseteq q]$

With this "identity thesis" in place, let us briefly go through the derivation of free choice effects arising with an EI like *irgendein* on this alternative-and-exhaustification framework. Consider a sentence like the following:

(10) Du *darfst* mit ***irgendeinem*** Professor sprechen.
You can with IRGENDEIN professor speak
'You can speak with any professor'

Irgendein is interpreted as an existential that obligatorily activates two kinds of alternatives: (i) scalar alternatives (of the form *two professors, three professors* etc.) and sub-domain alternatives (any subdomain of the quantificational restriction D, i.e. subsets of professors), as given in (11). Assuming for simplicity a domain with three professors, this can be represented as in (12):

(11) a. ASSERTION: $\Diamond \exists x \in D[\text{one}(x) \wedge \text{professor}(x) \wedge \text{speak to}(\text{you},x)]$
b. SCALAR-ALT = $\{\Diamond \exists x \in D[n(x) \wedge \text{professor}(x) \wedge \text{speak to}(\text{you}, x)]: \text{one} < n\}$
c. DOMAIN-ALT = $\{\Diamond \exists x \in D'[\text{one}(x) \wedge \text{professor}(x) \wedge \text{speak to}(\text{you}, x)]: D' \subseteq D\}$

(12) a. $\Diamond (a \vee b \vee c)$ ASSERTION
b. $\Diamond (a \wedge b)$ $\Diamond (a \wedge b)$ $\Diamond (a \wedge b)$ $\Diamond (a \wedge b \wedge c)$ SC-ALT
c. $\Diamond (a \vee b)$ $\Diamond (b \vee c)$ $\Diamond (a \vee c)$ D-ALT
$\Diamond a$ $\Diamond b$ $\Diamond c$

As shown in e.g. Fox (2007) for disjunction, the free choice inference triggered by *irgendein* cannot be compositionally derived from exhaustification over the set of alternatives in (12). The proposed solution is to allow for so-called "recursive exhaustification". Simply put, this amounts to applying the exhaustification operator to each one of the domain alternatives in (12c). The exhaustified domain-alternatives look as in (13), and the exhaustification over this enriched set of alternatives leads to the result in (14):

(13) a. $O \Diamond (a \vee b)$ $O \Diamond (b \vee c)$ $O \Diamond (a \vee c)$ Exhaustified D-ALT
$O \Diamond a$ $O \Diamond b$ $O \Diamond c$
b. $O \Diamond (a \vee b) = \Diamond (a \vee b) \wedge \neg\Diamond c$ $O \Diamond a = \Diamond a \wedge \neg\Diamond (b \vee c)$ ….

(14) $O \Diamond (a \vee b \vee c) = \Diamond (a \vee b \vee c) \wedge$ (= Assertion)
$\neg\Diamond (a \wedge b) \wedge \neg\Diamond (a \wedge c) \wedge \neg\Diamond (b \wedge c) \wedge$ (= Scalar Inference)

◊ a ∧ ◊ b ∧ ◊ c (= Free choice inference[3])

This derives the free choice inference triggered by *irgendein*: you can speak with a professor, and each one of the professors in the relevant domain is an option, i.e. the total variation inference mentioned in the introduction.

Summarizing, on this alternative-based approach, the behavior of elements like *irgendein* is fully derivable from the assumption that, like disjunction, they activate subdomain and scalar alternatives, the only difference with respect to disjunction residing in the obligatory character of this activation. The proposal sketched above, rigorously motivated in Chierchia's work, provides the background for the alternative-based account of *vreun* in Fălăuş (2010, 2012).

3.2 *Vreun* as a partial variation item

The main insight in Fălăuş (2010) that I will adopt in this paper is that the Romanian determiner *vreun* imposes a "partial variation only" condition on its context of occurrence. More specifically, the alternatives *vreun* activates, once exhaustified, will clash with any modal operator which can be independently established to give rise to a total variation inference.

Let us spell out this account in more detail. The alternative-based treatment of *vreun* rests on the two assumptions in (15):

(15) (a) *vreun* is an existential element which obligatorily activates two types of alternatives:
(i) scalar alternatives and (ii) minimal subdomain, i.e. *singleton* alternatives
(b) *vreun* includes among its alternatives the total variation EI *un oarecare.*

The first assumption is shared with other EIs like *algún* or *un qualche* and is due to Alonso-Ovalle and Menéndez-Benito (2010). The activation of singleton domain alternatives, as opposed to just any subdomain of the relevant D, is responsible for partial variation inferences, i.e. the fact that *vreun* is compatible with the exclusion of some alternatives in D. For concreteness, let us briefly consider an example:

(16) *Se poate* ca Maria să se căsătorească cu ***vreun*** doctor.
SE may that Maria SUBJ REFL marry with VREUN doctor
'Maria might marry some doctor or other.'

The derivation is similar to what we have seen for *irgendein* in the previous section, the only difference being the set of domain alternatives in (17c):

(17) a. Assertion: ◊ ∃x ∈ D [one(x) ∧ doctor(x) ∧ marry (Maria,x)] = ◊ (a∨b∨c)
b. Scalar alternatives
◊ (a∧b) ◊ (a∧c) ◊ (b∧c) SC-ALT
c. Domain alternatives considered for exhaustification
i. Initial ◊a ◊b ◊c
ii. Exhaustified ◊a ∧ ¬◊b ∧ ¬◊c ◊b ∧ ¬◊a ∧ ¬◊c ◊c ∧ ¬◊a ∧ ¬◊b
(18) O◊ (a ∨ b ∨ c) = ◊ (a ∨ b ∨ c) ∧ (= Assertion)

[3] The free choice inference here is a shorthand for (◊(a∨b)→◊c) ∧ (◊(a∨c)→◊b) ∧ (◊(b∨c)→◊a) ∧ (◊a→◊(b∨c)) ∧ (◊b→◊(a∨c)) ∧ (◊c→◊(a∨b)).

$\neg\Diamond (a\wedge b) \wedge \neg\Diamond (a\wedge c) \wedge \neg\Diamond (b\wedge c) \wedge$ (= Scalar Inference)
i. $\wedge \neg(\Diamond a \wedge \neg\Diamond b \wedge \neg\Diamond c) = \Diamond a \rightarrow (\Diamond b \vee \Diamond c)$
ii. $\wedge \neg(\Diamond b \wedge \neg\Diamond a \wedge \neg\Diamond c) = \Diamond b \rightarrow (\Diamond a \vee \Diamond c)$
iii. $\wedge \neg(\Diamond c \wedge \neg\Diamond a \wedge \neg\Diamond b) = \Diamond c \rightarrow (\Diamond a \vee \Diamond b)$
(i) + (ii) + (iii) = $(\Diamond a\wedge\Diamond b)\vee(\Diamond a\wedge\Diamond c)\vee(\Diamond b\wedge\Diamond c)$ (= Partial Variation inference)

The interpretation we obtain after exhaustification is compatible with the exclusion of some alternatives in D: at least two of the alternatives *a, b* and *c* are true in some world, but *not necessarily all* of them (partial variation inference).

The more restricted distribution of *vreun* in modal contexts, more concretely its exclusion from deontic modals, follows from the item-specific condition in (15b). Without getting into details, the hypothesis is that *vreun* encodes, 'grammaticizes' if you like, an implicature that we see in languages that have both total variation and partial variation EIs. Italian is one such case:

(19) Voglio sposare ***un qualche*** linguista ma non ***un*** linguista ***qualsiasi***. (Chierchia 2011)
'I want to marry some linguist or other, but not any old linguist.'

What (19) illustrates is the fact that partial variation EIs can optionally give rise to 'anti total variation' implicatures. By using *un qualche*, the speaker can signal that she wouldn't be happy with just any choice, e.g. she wouldn't marry a phonologist. According to Fălăuș (2010), the Romanian EI *vreun* encodes this implicature, by including the total variation inference usually associated with *un oarecare* among its active alternatives[4], as sketched in (20):

(20) a. $(\Diamond (a \vee b \vee c)) = \Diamond (a \vee b \vee c) \wedge \neg \Diamond (a\wedge b) \wedge \neg \Diamond (a\wedge c) \wedge \neg \Diamond(b\wedge c)$
$\wedge \Diamond a \rightarrow (\Diamond b \vee \Diamond c)$
$\wedge \Diamond b \rightarrow (\Diamond a \vee \Diamond c)$
$\wedge \Diamond c \rightarrow (\Diamond a \vee \Diamond b)$
$\wedge \neg (\Diamond a \wedge \Diamond b \wedge \Diamond c)$
b. $= (\Diamond a \wedge \Diamond b) \vee (\Diamond a \wedge \Diamond c) \vee (\Diamond b \wedge \Diamond c)$ (= Partial Variation)
$\wedge \neg(\Diamond a \wedge \Diamond b \wedge \Diamond c)$ (= Ban on Total Variation)

The meaning we get after exhaustification is that at least two alternatives are true in some world, but no more than two are (they cannot all be true), which tantamounts to obligatory partial variation. Some alternative is excluded, although we do not know which one.

How does this account derive the exclusion from deontic contexts? I present the proposed explanation only informally, and refer to Chierchia (2011) and Fălăuș (2012) for details. The basic intuition is that the meaning of *vreun* interacts with operators in its context of occurrence, and in particular with modals. It can be independently observed that certain modals, in particular deontic and bouletic operators, have an inherent free choice flavor, i.e. when taking an existential element in their scope, they give rise to a total variation inference. The simplest way to see that deontic modals indeed give rise to total variation is by looking back at the free choice effects triggered by disjunction in modal contexts (cf. (8)). If the relevant domain contains two

[4] This is a simplification: what *vreun* actually includes among its formal alternatives is the total variation EI *un oarecare* and its alternatives $<[[\text{un oarecare}_D]], [[\text{un oarecare}_D]]^{ALT}>$. For a more detailed discussion of this matter, the reader is referred to Fălăuș (2012).

alternatives, a cookie and a cupcake, we see that once we put these alternatives in the scope of a deontic modal, each one of them constitutes a possible way to satisfy the modal claim (i.e. total variation inference). The ban on total variation, a conjectured lexical property of *vreun*, makes it incompatible with such modal operators.[5]

Even in the absence of a formal implementation of this intuition, the underlying rationale should be clear. EIs have their lexical properties, modals have their own. The distribution and interpretation of EIs and modals, and more generally of alternative-activating elements, results from the interaction of their respective lexical properties. Some EIs can sustain both total and partial variation inferences, and as such can freely occur in any modal context. The modal will then determine whether the EI acquires a total or a partial variation meaning. Other EIs, like *vreun*, activate alternatives which are going to clash with the lexical semantics of certain modals, e.g. deontic modals. I would now like to show that this line of thinking can be fruitfully pursued to capture the distribution of *vreun* in imperatives.

4 Imperatives and modal inferences

Recall the contrast we are trying to capture: *vreun* is possible in some imperatives (5), but not others (6):

(5) *Apasă ***vreo** tastă!
Press.IMP.2SG VREUN key

(6) Verifică pe ***vreun*** site, poate e o greşeală.
Check.IMP.2SG on VREUN site maybe be.3SG a mistake
'Check on some website, maybe it's a mistake.'

Extending the proposal introduced in the previous section, I now argue that *vreun* is ruled out from imperatives that favor a total variation inference, such as the one in (5). Taking once again the behavior of disjunction as our guide, I start by introducing the proposal in Aloni (2007), who argues that disjunctive imperatives (*Do A or B*!) can yield a stronger (*choice-offering*) or a weaker (*alternative-presenting*) free choice effect. Having established that imperatives can indeed give rise to different kinds of modal inferences, I present evidence that the presence of *vreun* in imperatives correlates with the weak, partial variation inference: if the context (linguistic or extra-linguistic) clearly rules out the total variation inference, *vreun* can be felicitously used. Once again, the observed distribution follows from the interaction between the lexical semantics of *vreun* (its active alternatives) and the semantics of the embedding imperative.

4.1 The ambiguity of disjunctive imperatives

The free choice effect arising with disjunction in modal contexts (8) also surfaces in imperatives, as thoroughly discussed in Aloni (2007). Crucially, disjunctive imperatives can give rise to different free choice inferences. More precisely, they are argued to be ambiguous between (i) choice-offering and (ii) alternative-presenting readings. On the one hand, we find readings of

[5] For details on why epistemic modals do not enforce total variation, despite giving rise to free choice effects, as well as a discussion of how the inherent free choice character of deontic and bouletic modals can be implemented, see Fălăuş (2012).

imperatives where the free choice effect is very similar to the one in (8) above, called *choice-offering* readings. A typical example is the following:

(21) MOTHER: Do your homework *or* help your father in the kitchen!
(Son goes to the kitchen.)
FATHER: Do your homework!
SON: But, Mom told me I could also help you in the kitchen!

The imperative in (21) presents a choice between two equally possible actions; a continuation restricting freedom of choice sounds inappropriate and can therefore be objected to. The key property of choice-offering imperatives, according to Aloni, is the entailment that the addressee is both allowed to do *A* and to do *B*. Assuming that imperatives denote compliance conditions (which for simplicity can be treated as propositional alternatives), (22a) introduces the set containing the two propositions in (22b), both expressing a possible way of complying with the command expressed by the imperative:

(22) a. Post this letter *or* burn it!
b. {*that the addressee posts the letter, that the addressee burns the letter*}
c. You must post this letter or burn it.
d. You *may* post this letter *and* you *may* burn it.

On Aloni's account, the imperative entails that the hearer must do *A* or *B*, which in turn entails (22d), yielding the usual free choice effect. An interesting consequence of treating free choice as an entailment is the incompatibility of imperatives on their choice-offering reading with continuations like *'don't do B!'*:

(23) Post this letter *or* burn it! *#Don't you dare burn this letter*!

In other words, each one of the alternatives activated in the context qualifies as a possible course of action, and none of them can be (felicitously) excluded.

In addition to choice-offering readings, disjunctive imperatives can give rise to a weaker, less frequent interpretation, called *alternative-presenting* (Aquist 1965). The following example (due to Rescher and Robison 1964) illustrates this reading:

(24) TEACHER: John, stop that foolishness *or* leave the room!
(John gets up and starts to leave.)
TEACHER: Don't you dare leave this room!

Here, the second order is perceived as a clarification with respect to the first, and is meant to show that the first imperative should not be understood as offering a choice between two equally possible actions. In other words, on its alternative-presenting reading, a disjunctive imperative does not entail that the addressee is both allowed to do *A* and to do *B*. More precisely, (24) is interpreted as the singleton set consisting of the disjunctive proposition 'that the addressee does *A* or *B*' (rather than a set containing two propositions, as in (22b) above). Crucially then, in the absence of free choice entailment, the imperative is compatible with continuations overtly excluding one of the alternatives. Alternative-presenting readings are less frequent, a state-of-affairs which Aloni attributes to a general pragmatic preference for stronger interpretations.

This suffices to establish the main empirical point relevant for our purposes: when they take existentials in their scope, imperatives can yield different modal inferences. Assuming this distinction between the readings of disjunctive imperatives, I would now like to recast this ambiguity in terms of *total/partial variation*. More precisely, we can assimilate choice-offering imperatives to *total variation* contexts: *all* relevant alternatives qualify as possible options (which here represent possible courses of action). On their alternative-presenting interpretation, disjunctive imperatives qualify as *partial variation* contexts, where *some, but not necessarily all* relevant alternatives are possible courses of action. The next section argues that this reformulation provides a solution for the puzzling distribution of *vreun* in imperatives.

4.2 *Vreun* in imperatives

The discussion so far has introduced all the elements we need to account for the contrast between the imperatives in (5) and (6) above. First, recall from section 3 above that *vreun* is ruled out in contexts that prompt a total variation inference. Second, as detailed in the previous section, we know that alternative-presenting interpretations of imperatives yield a weak kind of free choice inference, i.e. partial variation. Putting everything together, we expect *vreun* to be excluded from choice-offering imperatives, but perfectly acceptable in alternative-presenting ones, for these are the only cases which qualify as partial variation contexts. The remainder of this paper provides evidence in favor of this hypothesis.

To show that this is indeed the relevant factor, let us take a closer look at the examples we are trying to account for:

(25) *Alege ***vreo*** carte!
Pick.IMP.2SG VREUN card

(26) Vorbeşte cu ***vreun*** vecin, să ia coletul în lipsa ta.
Talk.IMP.2SG with VREUN neighbor SUBJ take.3SG parcel in absence yours
'Talk to some neighbor, so that he picks up the parcel in your absence.

Imperatives with existential elements, such as the ones in (25)-(26), are potentially ambiguous between the two readings described above. The difference between the two is a highly context-dependent matter. The challenge is to understand what allows the interpretation of (26), but not (25), as an alternative-presenting imperative, i.e. a partial variation context.

In the absence of any contextual indication to the contrary, scenarios where one would use (5) or (25) are most likely scenarios where all relevant alternatives (the keyboard or the set of cards at play) would be taken as possible values for the indefinite phrase. If the speaker says nothing more than *Pick a card!* or *Press a key!*, the addressee feels entitled to choose freely any one of the keys or cards in front of him. This is precisely the type of context that is incompatible with *vreun*. To satisfy the obligatory partial variation, the meaning we obtain after exhaustifying the alternatives activated by *vreun* (as in (20) above), it is crucial that not all elements in the quantificational domain count as possible options. To put it differently, the speaker must be able to exclude some epistemic possibilities, although he doesn't necessarily know which ones. In contrast to (25), the imperative in (26) is easily compatible with a partial variation scenario. For example, imagine a context where A is expecting an important delivery, but will be away for the next couple of days. In this set up, B could easily utter (26) even if he knows that one of A's neighbors is never willing to help, and so wouldn't be a possible choice. Or without knowing

anything at all about A's neighbors. What matters is that there be a way to establish a partial variation scenario, something which can be easier to do in some contexts than others.

I think that this line of reasoning can be fruitfully pursued to capture the behavior of *vreun* without any construction-specific assumptions. Just like everywhere else, the distribution of *vreun* is wholly derivable from the interaction between the alternatives it activates and semantic properties of the operators in the context. The immediate problem raised by this explanation comes from the difference between modals and imperatives. More specifically, as mentioned above, the fact that certain modal operators (i.e. deontic and bouletic) induce a total variation inference for an existential element in their scope is assumed to be a lexical, inherent property of the modal in question. Imperatives cannot be claimed to have such an 'inherent free choice' meaning, although they can easily favor such inferences, as we have just seen. The various readings of imperatives with existentials are highly context-sensitive and quite difficult to tear apart. Accordingly, if we want to maintain that this is a real distinction among imperatives, and thus substantiate the claim that it plays a crucial part in the use of *vreun*, we need independent ways to identify the weak(er) modal inference arising in imperatives. In the absence of it, our explanation runs the risk of circularity: if *vreun* occurs in an imperative, then it is an alternative-presenting imperative; and if it is an alternative-presenting imperative, then *vreun* is ruled in.

One possible solution comes from the consideration of anti-exhaustifiers like *zum Beispiel* 'for example' (Schwager 2005):

(27) How could I save money?
Kauf ***zum*** ***Beispiel*** keine Zigaretten!
buy.IMP for example no cigarettes
'For example, don't buy any cigarettes.'

The imperative in (27) can be interpreted as expressing that buying cigarettes is an inexhaustive possibility (i.e., one possibility among others), which could be paraphrased as *One of the things you could do is not buy cigarettes.* Setting aside the mechanism which underlies the contribution of an anti-exhaustifier, I introduce an arguably equivalent construction in Romanian imperatives.

The Romanian counterpart of *zum Beispiel*, namely *de exemplu*, sounds quite strange in imperatives. Instead, Romanian resorts to a different strategy to express inexhaustive possibility: the insertion of an overt subject modified by the particle *şi* 'and, also', a construction I mark as ADD+SUBJ:[6]

(28) A: What should I do to make Mary feel better?
B: Du-o ***şi*** ***tu*** la un film!
Take.IMP.2SG-her ADD you(SG) at a movie
'(I don't know, one thing you could do is) Take her to a movie!'

The presence of an overt subject in an imperative is normally disallowed in Romanian (unless it is a stressed, contrastive subject, in sentences like *YOU solve this problem (not me)!*). I am not aware of any previous observation concerning the ADD+SUBJ construction, whose analysis lies

[6] In all examples with ADD+SUBJ considered here, it is important to distinguish the reading under discussion (which brings about the weaker interpretation of the imperative) from a truly additive reading: '*You* get out of the room, just like someone else did'. The two readings associate with very different intonational patterns and are used in different contexts, but the details of this distinction are beyond the scope of this paper.

beyond the scope of this paper. But there is compelling evidence that it functions as an anti-exhaustifier, namely it brings about a weak (in our terms partial variation) interpretation of the imperative, indicating one possible course of action among others. There are three empirical facts corroborating my claim. First, the insertion of ADD+SUBJ is not possible in imperatives interpreted as orders:

(29) Ieşi (****şi tu***) din cameră!
Get out. IMP.2SG ADD you(SG) of room
'Get out of the room!'

A second, related fact is the ungrammaticality of ADD+SUBJ in imperatives which are explicitly marked as indicating only one possible course of action:

(30) *We are organizing a conference, but received very few abstracts. We are wondering what to do and a colleague says:*
Nu văd decât o soluţie / Nu aveţi de ales:
not see.1SG only one solution not have.2PL to choose
extindeţi (****şi voi***) deadine-ul!
extend.IMP.2PL ADD you(PL) deadline-the
'I see only one solution/You have no choice: extend the deadline.'

Finally, the insertion of ADD+SUBJ is not possible in imperatives that contain a free choice item (typically licensed in choice-offering imperatives, cf. Aloni 2007):

(31) Alege (****şi tu***) ***orice*** carte!
Pick.IMP.2SG ADD you(SG) any card
'Pick any card!'

Taken together, these facts indicate that ADD+SUBJ patterns with imperatives indicating one possible course of action among others, i.e. functions as an anti-exhaustifier. If the context clearly rules out this reading of the imperative, ADD+SUBJ cannot be used. This correlation carries over to imperatives with existential elements, as in (32):

(32) Vorbeşte (***şi tu***) cu Paul ***sau*** Maria.
Talk.IMP.2SG ADD you(SG) with Paul or Maria

As we have seen before, disjunctive imperatives are ambiguous. ADD+SUBJ can be optionally inserted, but when present, the imperative cannot convey a choice between two equally possible courses of action (i.e. talk to Paul and talk to Maria). It simply means that the addressee could talk to Paul or Maria, among other things. In other words, once the imperative embeds an existential element, the presence of ADD+SUBJ patterns with the weaker, partial variation inference.

If the hypothesis proposed above is on the right track, we predict *vreun* to always be possible in imperatives that allow for ADD+SUBJ. This prediction seems to be borne out: all imperatives where *vreun* occurs allow the insertion of ADD+SUBJ:

(32) Verifică ***şi tu*** pe ***vreun*** site!

Check.IMP.2SG ADD you(SG) on VREUN site
'Check on some website!'

As mentioned above, I am not aiming to offer an account of why ADD+SUBJ functions as an anti-exhaustifier. I am simply introducing these facts as an arguably independent, albeit preliminary, test to identify weaker readings of imperatives and support the correlation with the distribution of *vreun*. More empirical investigation is necessary before reaching firm conclusions on this correlation, and understanding the exact contribution of each element involved: imperative, *vreun* and possibly constructions like ADD+SUBJ. But the main point should be clear: the explanation for the behavior of *vreun* in imperatives should be sought in the semantics of imperatives, and the arising modal inferences. More generally, I take the facts discussed in this paper to indicate the need for more refined generalizations on the interaction between imperatives and various kinds of indefinites.[7]

5 Concluding remarks

Let me summarize the main points emerging from our discussion. The starting point was the fact that EIs cross-linguistically are known to sustain modal inferences of a stronger (total variation) or a weaker (partial variation) type. The Romanian determiner *vreun* has been previously argued to only allow partial variation. Focusing on a new context of occurrence of *vreun*, namely imperatives, we have seen that they do not easily pattern with the other contexts where the Romanian EI is used. I have argued that a more coherent picture can be drawn once we (i) pursue an alternative-based approach to EIs and (ii) pay closer attention to the modal inferences arising in imperatives. Once we adopt the hypothesis that the alternatives activated by *vreun* are incompatible with operators that give rise to total variation inferences, the distribution of *vreun* in imperatives falls into place without any construction-specific assumptions.

An important issue that remains to be explored concerns the factors responsible for satisfying the partial variation condition imposed by *vreun* (e.g. lexical properties of the embedding operator, the role of anti-exhaustifiers). Future research needs to probe further into the source of the observed inferences (modal, EI or the interaction of the two), and test the predictions made by the alternative-based approach I am pursuing. But I take the data introduced in this paper to provide an interesting argument for the relevance of total/partial variation to a proper understanding of *vreun*, and more generally to the typology of EIs.

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[7] A similar point is convincingly made in Dayal (2012), who challenges the commonly assumed fact that imperatives *per se* constitute licensing contexts for free choice items like *any* and shows the need for a more fine-grained understanding of the interaction between imperatives and free choice elements.

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